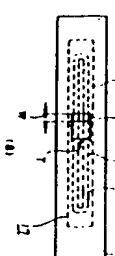


accordance with a state of the X rays 12. In such a way, based on a position signal 16a from the mechanism 16 and the detecting signal 17a, an angle of diffraction of the diffracted X rays 12 and its intensity are measured.



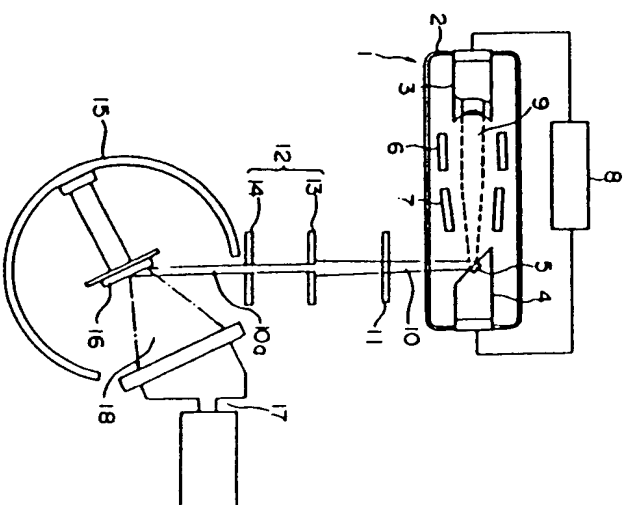
2: X rays, 28: angle of diffraction

#### (54) MEASURING METHOD FOR RESIDUAL STRESS OF CERAMICS MEMBER

- (11) 1-276052 (A) (43) 6.11.1989 (19) JP
- (21) Appl. No. 63-105919 (22) 28.4.1988
- (71) TOSHIBA CORP (72) SHUNICHIRO TANAKA
- (51) Int. Cl. G01N23/207, G01L1/00

**PURPOSE:** To non-destructively and exactly measure the residual stress in a minute part by collimating X rays to a minute spot by a double pin hole and irradiating a ceramics member therewith.

**CONSTITUTION:** X rays 10 whose effective emission angle has been narrowed by a minute beam focus radiating from a prescribed position of an X-ray tube bulb 1 pass through a filter 11 and taken out as X rays of single wavelength. Subsequently, this X rays are collimated to a prescribed minute diameter spot by a collimator 12 having a double pin hole, and irradiates a ceramics member 16 which has been placed in the center position of a goniometer 15. Also, a position sensitive proportion detector 17 has a detecting part on a surface meter, and executes a measurement of intensity and an angle of diffraction, etc., of X rays which have been diffracted by the member 16.



8: high voltage power source

#### (54) METHOD OF EVALUATING DEGREE OF ELEMENT DISTRIBUTION

- (11) 1-276053 (A) (43) 6.11.1989 (19) JP
- (21) Appl. No. 63-106316 (22) 28.4.1988
- (71) MATSUSHITA ELECTRIC IND CO LTD (72) NORIKO ISHIZU(2)
- (51) Int. Cl. G01N23/22, H01J37/22, H01J49/06

**PURPOSE:** To more exactly recognize the flocculation condition of a material to be evaluated and to more exactly evaluate the degree of dispersion of elements by determining the ratio of the true flock among the position groups exhibiting the X-ray